

**MISSOURI HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT  
PART I**

**PERMIT NUMBER: MOD980971626**

**PERMITTEE**

Owner: Safety-Kleen Systems, Incorporated	Operator: Safety-Kleen Systems, Incorporated
5400 Legacy Drive, Cluster II, Bldg 3	5400 Legacy Drive, Cluster II, Bldg 3
Plano, TX 75024	Plano, TX 75024

**FACILITY LOCATION**

2400 Big Bear Court  
Columbia, Missouri 65202  
Boone County  
North Latitude - 38°58'33"  
West Longitude - 92°19'54"

**FACILITY DESCRIPTION**

Safety-Kleen Systems, Incorporated's Columbia, Missouri, facility is an accumulation point for spent solvents, paint wastes, lacquer thinner wastes, and waste oil generated by Safety-Kleen customers, of whom, the majority are small quantity generators. The facility also stores other types of wastes on a ten-day transfer basis. Wastes are ultimately shipped off-site to a Safety-Kleen recycling facility or a contract reclaimer for processing. Capabilities include the storage of hazardous waste in containers and tanks.

**PERMITTED ACTIVITIES**

This Permit allows for the storage of "characteristic" hazardous waste as well as various "F" and "K" listed hazardous wastes as specified in the Part A application. The Permit also contains

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contingent corrective action provisions to address any release(s) to the environment of hazardous waste or hazardous constituents at the facility that may pose a threat to human health or the environment.

EFFECTIVE DATES OF PERMIT: \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Doyle Childers, Director  
DEPARTMENT OF NATURAL RESOURCES

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## INTRODUCTION

After public notice in accordance with 10 CSR 25-8.124 and 40 CFR Part 124 and review of the Safety-Kleen Systems, Incorporated's Hazardous Waste Facility Permit Application (hereafter referred to as the Application), the Missouri Department of Natural Resources (hereafter referred to as the Department) has determined that the application substantially conforms to the provisions of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (commonly known as RCRA) and regulations promulgated thereunder by the United States Environmental Protection Agency (hereafter referred to as EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations) and the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act). In accordance with Section 260.375.13, RSMo, and the Solid Waste Disposal Act, the Department hereby approves the application and issues Permit Number MOD980971626 to Safety-Kleen Systems, Incorporated (hereafter referred to as the Permittee) for the construction and operation of the hazardous waste facility as set forth in the application and this Permit. This Permit also addresses corrective action requirements for solid waste management units and the requirements of the Hazardous and Solid Waste Amendments of 1984 (commonly known as HSWA) as administered and enforced by the Department. Applicable regulations are found in 40 CFR Parts 124, 260 through 264, 266, 268, and 270, as specified in this Permit. All portions of this Permit, referred to as Part I, are issued under state authority, with the exception of Part II which is issued by the EPA to address regulatory requirements of the HSWA for which the state is not yet authorized. Part I of this Permit shall remain in effect even if Part II is terminated or has expired.

The Permit application that was submitted by the Permittee May 29, 2002, and all revisions dated June 4, 2002, July 29, 2002, December 23, 2002, August 12, 2003, January 6, 2004, April 26, 2005, and the habitual violator disclosure, will hereafter be referred to as the "approved Permit application." The approved Permit application, along with all of the additional documents to be submitted under Schedule of Compliance, Item I.A. is defined as the "consolidated Permit application."

All Permit application information shall be available to the public unless nondisclosure is requested in writing as set forth in Section 260.430, RSMo and 10 CSR 25-7.270(2)(B)2. The Permit and accompanying material will be available for review by the public at the Department's central office in Jefferson City, Missouri, the EPA Region VII office in Kansas City, Kansas, and the Columbia Boone County Library, Columbia, Missouri.

The Permittee's hazardous waste facility is located at 2400 Big Bear Court, Columbia, Missouri. The Permittee is permitted to operate the container storage facilities and tank storage units as specified in this Permit.

Construction and operation of this hazardous waste facility and corrective action shall be in accordance with the provisions of this Permit, the Missouri Hazardous Waste Management Law (Sections 260.350 to 260.434, RSMo), the rules and regulations promulgated thereunder [Code of State Regulations, Title 10, Division 25 (10 CSR 25)] as effective on the date of this Permit, all the final engineering plans, petitions, specifications, and operating procedures which were submitted to the Department during the Permit application review process and which are included in the final version of the Permit application, which is hereby approved by the Department, and any other conditions, changes, or additions to the plans, specifications, and procedures as specified in this Permit. The consolidated Permit application, which includes engineering plans, specifications and operating procedures, is therefore incorporated into the conditions of this Permit. All conditions specified in this Permit supersede any conflicting information in the consolidated Permit application. Where conflicts arise between documents the latest revision shall be effective.

Any inaccuracies found in information submitted may be grounds for the termination, revocation and re-issuance, or modification of this Permit in accordance with 40 CFR Part 270 Subpart D, incorporated by reference in 10 CSR 25-7.270(1) and modified in 10 CSR 25-7.270(2)(D), and for potential enforcement action. The Permittee shall inform the Department of any deviation from, or changes in, the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or Permit conditions.

When the Department receives any information (such as inspection results, information from the Permittee, or requests from the Permittee) it may decide whether cause exists to modify, revoke and reissue, or terminate a facility's permit. All such changes to the Permit will be in accordance with 10 CSR 25-7.270(2)(D), 10 CSR 25-8.124, and 40 CFR Part 270 Subpart D, as incorporated by reference in 10 CSR 25-7.270(1).

The Permittee is required to comply with all applicable environmental laws and regulations enforced by the Department. These environmental requirements are administered by the Air Pollution Control Program, the Hazardous Waste Program, the Land Reclamation Program, the Water Protection Program, and the Solid Waste Management Program. Noncompliance with these environmental laws and regulations may, in certain circumstances, result in the suspension or revocation of this Permit and may subject the permit holder to civil and criminal liability.

This Permit for operational, closure, and corrective action activities is issued only to the Permittee named above. This Permit is issued for a period of ten years and expires at midnight on \_\_\_\_\_. This Permit is subject to review and modification by the Department in accordance with Section 260.395.12, RSMo.

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

All citations to federal regulations throughout this Permit are for the sake of convenient reference. The federal regulations are adopted by reference in 10 CSR 25. In the instances where state regulations are more stringent, the appropriate state reference is given and shall apply.

Any appeals of the issuance or denial of the Permit or specific Permit conditions based on state authority shall be filed in accordance with Section 260.395.11 and 621.250, RSMo. The appeal shall be filed with the Administrative Hearing Commission within 30 days after the Permit decision is mailed or within 30 days of the Permit decision being delivered, whichever is earlier. If the petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission.

40 CFR 264.101(a), as incorporated by reference in 10 CSR 25-7.264(1), requires all owners or operators of facilities seeking a permit for the treatment, storage, or disposal of hazardous waste to institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit, regardless of the time at which waste was placed in such unit.

40 CFR 264.101(b), as incorporated by reference in 10 CSR 25-7.264(1), requires that permits issued under the Hazardous Waste Management Law, contain a schedule of compliance for corrective action (where corrective action cannot be completed prior to Permit issuance) and assurances of financial responsibility for completing such corrective action.

40 CFR 264.101(c), as incorporated by reference in 10 CSR 25-7.264(1), requires that corrective action be taken by the facility owner or operator beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates that, despite the owner/operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action.

Further, 40 CFR 264.101(c), as incorporated by reference in 10 CSR 25-7.264(1), stipulates that the owner/operator is not relieved of any responsibility to cleanup a release that has migrated

beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. In addition, assurances of financial responsibility for completing such corrective action must be provided.

40 CFR 270.32(b)(2), as incorporated by reference in 10 CSR 25-7.270(1), requires that each permit issued under that section contain terms and conditions as the Department determines necessary to protect human health and the environment.

On July 6, 1999, Missouri received final authorization for revisions to its hazardous waste management program, including the corrective action portion of the HSWA Codification Rule (July 15, 1985, 50 FR 28702) which had been previously adopted by the state. Thus, the corrective action requirements implemented by the state in lieu of EPA are incorporated into Part I of this Permit and are under state authority. Authority for other HSWA requirements for which the state is not authorized is retained by the USEPA under Part II of this Permit.



## DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in Resource Conservation and Recovery Act (RCRA) and 40 CFR Parts 124, 260, 261, 264, 266, 268, and 270, and 10 CSR 25, unless this Permit specifically provides otherwise. Where terms are not defined in RCRA, the regulations, the permit, or the United States Environmental Protection Agency guidance or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Area of Concern (AOC)" means any area where an actual or potential release of hazardous waste or hazardous constituents which is not from a solid waste management unit has occurred or is occurring and is determined by the Department to pose a current or potential threat to human health or the environment. Investigation and/or remediation of AOCs may be required pursuant to Section 260.395, RSMo, and 40 CFR 270.32(b)(2), as incorporated by reference in 10 CSR 25-7.270(1).

"Director" means the Director of the Missouri Department of Natural Resources.

"Facility" means:

"All contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing hazardous waste."

"All contiguous property under the control of the owner/operator, for the purpose of implementing corrective action under 40 CFR 264.101, as incorporated by reference in 10 CSR 25-7.264(1) and as specified in Corrective Action Conditions I. through XV. of this Permit."

"Hazardous constituent" means any chemical compound listed in 40 CFR Part 261 Appendix VIII as incorporated in 10 CSR 25-4.261.

"Hazardous waste" means any waste, or combination of wastes as defined by or listed in 10 CSR 25-4, which because of its quantity, concentration, physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or which may pose a threat to the health of humans or other living organisms.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous

constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"Solid Waste Management Unit (SWMU)" means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" means actions to control or abate threats to human health and/or the environment from releases at RCRA facilities and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

## SCHEDULE OF COMPLIANCE

- I. Within 60 calendar days after the effective date of this Permit, the Permittee shall:
  - A. Submit to the Department two copies of the consolidated Permit application as required by 10 CSR 25-7.270(2)(B)7. This consolidated Permit application shall include the following:
    1. The "approved Permit application," as defined in the Introduction of this Permit; and
    2. All changes made to the application as a result of the public comment period.
  - B. Submit to the Department a certification by the Permittee that the Permittee has read the Permit in its entirety and understands all Permit conditions contained herein.
  - C. Submit to the Department a check or money order payable to the State of Missouri for any outstanding engineering review costs.
  - D. Submit to the Department a check or money order payable to the State of Missouri for \$1,000 for each year the Permit is to be in effect beyond the first year. This Permit is effective for ten years. Since the Permittee has submitted a check for \$1,000 with the Resource Conservation and Recovery Act Permit application, the remaining balance to be submitted by the Permittee is \$9,000 less an equivalent of \$1,000 for the period of time from the effective date of this ten year Permit to \_\_\_\_\_. For the purpose of calculating the equivalent per day cost of \$1,000/year, the factor of 365 days/year shall be used. This check shall be directed to the Hazardous Waste Program, Permits Section.
- II. The Permittee shall update the facility's financial assurance instrument to reflect the cost estimate in the approved Permit application within 60 calendar days after the effective date of this Permit. The Permittee shall submit the updated financial assurance instrument to the Department for approval within 15 days of securing the instrument.
- III. The Permittee shall comply, as necessary, with all contingent corrective action requirements of this Permit as specified in the Corrective Action Conditions section of this Permit.

- IV. Within 60 calendar days after the effective date of this Permit, the Permittee shall make the necessary modifications to the operation, procedures, control system, and check lists to be in compliance with any permit conditions that are new or modified as compared to the March 11, 1993, Hazardous Waste Management Facility Treatment and Storage Permit and subsequent modification of that permit.

#### SUBMITTAL OF REQUIRED INFORMATION

- I. The Permittee shall submit three copies of all reports, documents, or plans/specifications required under the terms of this Permit to:

Chief, Permits Section  
Missouri Department of Natural Resources  
Hazardous Waste Program  
1738 E. Elm Street (lower level)  
P.O. Box 176  
Jefferson City, MO 65102-0176

- II. The Permittee shall submit two copies of all reports, documents, or plans/specifications required under the terms of this Permit to:

Chief, RCRA Corrective Action and Permits Branch  
U.S.EPA, Region VII  
Air, RCRA and Toxics Division  
901 North 5<sup>th</sup> Street  
Kansas City, KS 66101

STANDARD PERMIT CONDITION

- I. The Permittee shall comply with the requirements set forth in the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act), Section 260.350, et seq., RSMo, 40 CFR Part 264 Subpart H, 40 CFR 270.30, 40 CFR 270.40, 40 CFR 270.42, and 40 CFR 270.51, as incorporated and modified in 10 CSR 25-7 and 10 CSR 25-8.

#### GENERAL PERMIT CONDITIONS

- I. The Permittee shall comply with the requirements set forth in 40 CFR Part 264 Subpart B, 40 CFR Part 264 Subpart C, 40 CFR Part 264 Subpart D, 40 CFR Part 264 Subpart E, 40 CFR Part 264 Subpart H, 40 CFR Part 268, and 40 CFR Part 270, as incorporated and modified in 10 CSR 25-7 and 10 CSR 25-8.

- II. Notification of an Emergency Situation [Chapter 260.505.4, RSMo]

The Permittee shall at the earliest practical moment upon discovery of an emergency involving the hazardous waste under the Permittee's control, notify the Department's emergency response hotline at (573) 634-2436 and the National Response Center at 1-800-424-8802.

## SPECIAL PERMIT CONDITIONS

The Department has established the following additional Permit conditions for the Permittee's hazardous waste facility.

### I. Storage in Containers [40 CFR Part 264 Subpart I]

#### A. Waste Identification

The Permittee shall store in containers only the hazardous wastes identified in the Part A Permit Application. All stored wastes are subject to the terms of this Permit.

#### B. Waste Quantities

Containerized wastes are stored in two areas; the metal Flammable Materials Storage Shelter and the Container Storage Area. The maximum inventory of wastes that may be stored at any time for each area is defined below:

##### Container Storage Area

The maximum inventory of wastes that may be stored at any time is 1240 gallons.

##### Flammable Materials Storage Shelter

The maximum inventory of wastes that may be stored at any time is 2186 gallons.

##### Permitted Storage Volume

For the container storage area and the flammable materials storage area, the total volume stored for inspection purposes may be calculated by:

A	Number of 5 gallon Containers
B	Number of 16 gallon Containers
C	Number of 30 gallon Containers
D	Number of 55 gallon Containers
E	Number of gallon Stored in Off-Sized Containers

$$(A \times 5) + (B \times 16) + (C \times 30) + (D \times 55) + E = \text{Total Stored Volume (gallon)}$$

#### C. Condition of Containers [40 CFR 264.171]

1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from the container to a container that is in good condition or manage the waste in some other way that complies with the conditions of this Permit, such as over-packing.



2. During the entire on-site storage period, containers storing hazardous wastes shall be labeled and marked in accordance with the applicable, currently-effective United States Department of Transportation (DOT) regulations regarding hazardous materials, 49 CFR Part 172.

D. Compatibility of Waste with Containers [40 CFR 264.172]

1. The Permittee shall use a container that is made of, or lined with, materials which will not react with and are otherwise compatible with the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.
2. Only DOT approved containers shall be used for storage of hazardous waste on-site.

E. Management of Containers [40 CFR 264.173]

1. A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste. A container holding hazardous waste shall not be opened, handled, or stored in a manner that may rupture the container or cause it to leak or spill.
2. The Permittee shall store containers in a manner that ensures physical stability and allows for visual inspection of each container and each container's label, except for visual inspection of containers not containing free liquids where container size prohibits the inspection of center containers when palletized provided the outermost containers are clearly labeled as to the number of containers on the pallet.
3. Class 1 flammable liquids, as defined in the National Fire Protection Association's "Flammable and Combustible Liquids Code" (NFPA 30, as revised 1996), shall not be stacked over five feet in height. Class II combustible liquids, as defined in the National Fire Protection Association's "Flammable and Combustible Liquids Code" (NFPA 30, as revised 1996) shall not be stacked over ten feet in height.
4. The Permittee shall store containers in a manner that ensures physical stability and allows for visual inspection of each container. For containers that are stacked on pallets, the maximum stacking height shall not exceed six and one-half feet. All container labels shall be visible from an aisle. All containers shall be accessible from an aisle. A minimum of two feet

of aisle space shall be maintained between rows of adjacent containers to allow for inspection of each container. When containers are stored on pallets, a minimum of one-half foot of spacing shall be maintained between the pallets within the row.

F. Inspections [40 CFR 264.174].

At least weekly, the Permittee shall inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

G. Containment [40 CFR 264.175].

The Permittee shall design and operate containment systems for the container storage areas as follows:

1. A base shall underlie the containers, which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
2. The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation unless the containers are elevated or are otherwise protected from contact with accumulated liquids.
3. The containment system shall have sufficient capacity to contain 10 percent of the volume of all containers or 100 percent of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.
4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in Special Permit Condition I.G.3. above to contain any run-on which might enter the system.
5. Spilled or leaked waste shall be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

H. Staging [10 CSR 25-7.264(2)(A)3.]

A container holding hazardous waste shall not be staged, stored, or managed in an area not addressed by this Permit for a period, which exceeds twenty-four hours.

I. Special Requirements for Ignitable or Reactive Waste [40 CFR 264.176 and 10 CSR 25-7.264(2)(I)]

The Permittee shall maintain the facility as illustrated in Appendix E of the approved Permit application in such a manner that meets compliance with 10 CSR-7.264(2)(I)(5).

J. Special Requirements for Incompatible Waste [40 CFR 264.177]

1. The Permittee shall not place incompatible wastes or materials in the same container unless such action is in compliance with the requirements of 40 CFR 264.17(b).
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
3. The Permittee shall separate by device (i.e., a dike or other physical means) containers of incompatible waste or materials. No incompatible waste or materials may be stored together in the storage areas without providing separation sufficient to prevent the mixing of any spilled materials which may be incompatible.

K. Closure [10 CSR 25-7.264(2)(G)]

At closure, the Permittee shall remove all hazardous waste and hazardous waste residues from the container storage areas and containment systems and close in accordance with the closure plan in the approved Permit application for the hazardous waste management facility. If the Permittee is unable to close according to the closure plan, then the Permittee must submit a permit modification to the Department in accordance with 40 CFR 270.42.

II. Storage in Tanks [40 CFR Part 264 Subpart J]

A. Waste Identification

The Permittee shall store only the hazardous wastes identified in the Part A Permit application in the identified tanks. All stored and treated wastes are subject to the terms of this Permit and shall be managed as hazardous waste.

B. Waste Quantities

This Permit applies to the following storage tank, unless as provided elsewhere in this Permit.

Table I – Waste Quantities

Tank ID	Design Capacity	Working Capacity
Waste Mineral Spirits	15,000 gallons	14,250 gallons

C. Assessment of Existing Tank System's Integrity [40 CFR 264.191]

The Permittee's 15,000-gallon vertical above ground tank qualifies as an existing tank system. The Permittee has provided a written tank integrity assessment for the existing tanks as required by 40 CFR 264.191(a). The Permittee shall keep the written assessment on file at the facility.

D. Design and Installation of new Tank Systems or Components  
[40 CFR 264.192]

1. Prior to operating any new tank systems at the facility, the Permittee shall obtain and submit to the Director a written assessment, reviewed and certified by an independent, qualified, professional engineer registered in the state of Missouri. This certification shall be in accordance with 40 CFR 270.11(d). This assessment shall include a final design set of certified construction drawings, and shall show that the foundation, structural supports, seams, connections and pressure controls are adequately designed to ensure that the tank systems will not collapse, rupture, or fail. This assessment will be subject to regulatory review and approval process.
2. The Permittee shall ensure that proper handling procedures are adhered to in order to prevent damage to new tank systems during installation. Prior to placing new tank systems in use, an independent, qualified installation inspector or an independent, qualified, professional engineer registered in the state of Missouri, either of whom is trained and experienced in the proper installation of tank systems or components, shall inspect the systems for weld

breaks, punctures, scrapes of protective coatings, cracks, corrosion,

and other indications of structural damage or other inadequate construction/installation. All deficiencies noted during the inspection shall be remedied before the tank systems are placed in use.

3. The Permittee shall test all new tanks and ancillary equipment for tightness prior to being placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being placed into use.
4. The Permittee shall ensure that all ancillary equipment is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
5. The Permittee shall obtain and keep on file at the facility, written statements by those persons required to certify the design of the tank systems and supervise the installation and repairs of the tank systems in accordance with the requirements of 40 CFR 264.192(b) through (f).

E. Containment and Detection of Releases [40 CFR 264.193]

1. In order to prevent the release of hazardous waste or hazardous constituents into the environment, the Permittee shall provide secondary containment that meets the requirements of 40 CFR 264.193 for all of its tank systems.
2. Secondary containment systems shall be:
  - a. Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and
  - b. Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
3. To meet the requirements of 40 CFR 264.193(b), secondary containment systems shall be, at a minimum:
  - a. Constructed of, or lined with, materials that are compatible

with the wastes to be placed in the tank systems and shall have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and hydrologic forces), physical contact with the waste to which the materials are exposed, climatic conditions, and the stress of daily operation (including stresses from nearby traffic);

- b. Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;
- c. Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure, or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the Permittee is able to demonstrate to the Department's satisfaction that existing detection technologies or site conditions will not allow detection of a release within 24 hours and that a specified additional amount of time is necessary; and
- d. Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if the Permittee is able to demonstrate to the Department's satisfaction that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours. If the collected material is a hazardous waste under 40 CFR Part 261, it shall be managed as a hazardous waste. If the collected material is discharged through a point source to waters of the state, it is subject to the requirements of Chapter 644, RSMo, as amended. If the collected material is discharged to a Publicly Owned Treatment Works, it is subject to the requirements of Chapter 644, RSMo and its implementing

regulations. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302. The Permittee will require an approval from Water Protection Program prior to discharge.

4. Secondary containment for tanks shall include one or more of the following devices: a liner (external to the hazardous waste storage tank); a vault; a double-walled tank; or an equivalent device, as approved by the Director. The design, construction, and operation of these devices shall satisfy the requirements of 40 CFR 264.193(e).
5. Ancillary equipment shall be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of 40 CFR 264.193(b) and (c), except for the following tank system components that are visually inspected for leaks on a daily basis: aboveground piping (exclusive of flanges, joints, valves, and other connections), welded flanges, welded joints, and welded connections, sealless or magnetic coupling pumps and sealless valves, and pressurized above ground piping systems with automatic shut-off devices.

F. General Operating Requirements [40 CFR 264.194].

1. The Permittee shall not place hazardous wastes in a tank system if the hazardous wastes would cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.
2. The Permittee shall use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These shall include at a minimum:
  - a. Spill prevention controls such as, but not limited to, check valves and dry disconnect couplings; and
  - b. Overfill prevention controls such as, but not limited to, level sensing devices, high level alarms, automatic feed cutoffs, or a bypass to standby tanks, which limit tank working volumes.



- G. Inspections [40 CFR 264.195].  
The Permittee shall inspect all tanks and tank systems as specified in this Permit condition and the approved Permit application. At a minimum, an independent, qualified, professional engineer registered in the state of Missouri shall test all of the permitted tanks by ultrasonic methods for material thickness and perform a detailed visual inspection. These tests and inspections shall be made at regular intervals not to exceed 12 months between inspections.
1. The Permittee shall develop and follow a schedule and written procedures for inspecting overfill controls. This schedule shall specify a minimum frequency of once each week for testing the electronic overfill control system, and this information shall be recorded in the operating record.
  2. The Permittee shall inspect at least once each operating day:
    - a. Aboveground portions of the tank systems to detect corrosion or releases of waste;
    - b. Data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design; and
    - c. The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste.
  3. The Permittee shall document these inspections in the operating record of the facility. Any deterioration or malfunction found shall be remedied in accordance with 40 CFR 264.15(c). Also, 40 CFR 302.6 may require the Permittee to notify the National Response Center in the event of a release.
- H. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-use Tanks Systems [40 CFR 264.196 and 10 CSR 25-7.264(2)(J)4.]

A tank system or secondary containment system from which there has

been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the Permittee shall satisfy the following requirements:

1. The Permittee shall immediately stop the flow of hazardous waste into the tank or secondary containment system and inspect the system to determine the cause of the release.
2. Removal of waste from tank systems or secondary containment systems:
  - a. If the release was from the tank system, the Permittee shall, within 24 hours after detection of the leak, remove as much of the waste as is necessary to prevent further release of hazardous waste into the environment and to allow inspection and repair of the tank system to be performed.
  - b. If the material released was to a secondary containment system, the Permittee shall remove all released materials from the secondary containment system within 24 hours.

3. Containment of Releases to the Environment

The Permittee shall immediately conduct an inspection of the release and, based upon that inspection, shall:

- a. Prevent further migration of the leak or spill to soils or surface water; and
- b. Remove, and properly dispose of, any contaminated soil and/or surface water. Those tank systems which are intended to be closed without removing the hazardous waste shall meet the requirements of 10 CSR 25-7.264(2)(N)1.A. and 40 CFR Part 264 Subpart N, as incorporated in 10 CSR 25-7.264. If the tank system cannot meet the requirements and contamination exists, the Permittee shall clean up contaminated residues and hazardous constituents to the greatest extent practical during closure.

4. Notification and Reports

- a. Any release to the environment, except a release that is exempted under 40 CFR 264.196(d)(2), shall be reported to

the Director within 24 hours of its detection. If the release has been reported pursuant to 40 CFR Part 302, that report will satisfy this requirement.

- b. A leak or spill of hazardous waste is exempted from notification and reporting requirements if it is less than or equal to a quantity of one pound and is immediately contained and cleaned up.
  - c. Within 30 days of detection of a release to the environment, the Permittee shall submit a report to the Director which details the likely route of migration of the release, characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate), the results of any monitoring or sampling conducted in connection with the release (if available; when these results are not available within 30 days, these results shall be submitted as soon as they become available), proximity to downgradient drinking water, surface water, and populated areas, and descriptions of response actions taken or planned.
5. The tank system shall be closed in accordance with Special Permit Condition II.K., unless the Permittee satisfies the following requirements:
- a. If the cause of the release was a spill that has not damaged the integrity of the system, the Permittee may return the system to service as soon as the released waste is removed and repairs, if necessary, are made;
  - b. If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service; and
  - c. If the source of the release was a leak into the environment from a tank system component without secondary containment, the Permittee shall comply with the provisions of 40 CFR 264.196(e)(4).

6. The Permittee shall provide certification of major repairs to tank systems from which there has been a leak or spill, or which was unfit for use, in accordance with 40 CFR 264.196(f)
- I. Special Requirements for Ignitable or Reactive Waste [40 CFR 264.198]
1. The Permittee shall not place ignitable or reactive waste in tank systems, unless:
    - a. The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste in 40 CFR Part 261, and the Permittee complies with 40 CFR 264.17(b); or
    - b. The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or
    - c. The tank system is used solely for emergencies.
  2. The Permittee shall comply with the requirements for the maintenance of protective distances between tanks storing ignitable or reactive wastes and any public ways, streets, alleys, or any adjoining property that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981, incorporated by reference in 40 CFR 260.11).
- J. Special Requirements for Incompatible Wastes [40 CFR 264.199]
1. The Permittee shall not place incompatible wastes or materials in the same tank system unless such action is in compliance with the requirements of 40 CFR 264.17(b).
  2. The Permittee shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless the Permittee complies with 40 CFR 264.17(b).

K. Closure and Post-Closure Care [40 CFR 264.197 and 10 CSR 25-7.264(2)(J)5.]

At closure of a tank system, the Permittee shall remove or decontaminate all hazardous waste and hazardous residues from the tank systems, including, but not limited to: contaminated tank system components (liners, etc.), contaminated soils, and contaminated equipment and structures, and shall close in accordance with the Closure Plan in the approved Permit application. If the Permittee is unable to close according to the Closure Plan, then the Permittee must submit a permit modification to the Department in accordance with 40 CFR 270.42. The Closure Plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in 40 CFR Part 264 Subparts G and H, 10 CSR 25-7.264(2)(G) and 10 CSR 25-7.264(2)(H).

III. Waste Minimization

Pursuant to 40 CFR 264.73(b)(9), the facility operating record shall contain a certification

by the Permittee, made no less often than annually, that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment.

IV. Seismic Evaluation Requirements [10 CSR 25-7.270(2)(B)4.]

The Permittee has demonstrated compliance with the seismic requirements as certified by an independent professional engineer registered in the state of Missouri. The Permittee shall maintain the seismic evaluation in the operating record.

V. Air Emission Standards for Tanks, Surface Impoundments, and Containers [10 CSR 25-7.264(1)]

A. The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subpart BB, as amended December 8, 1997, for all units identified in the

approved permit application.

- B. The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subpart CC, as amended December 8, 1997, for all units identified in Table II.

TABLE II - Units Subject to Subpart CC Standards

Unit Identification	Unit Type	Subpart CC Control Option
Waste Mineral Spirits Tank	15,000 gallon tank	40 CFR 264.1084
Container Storage Area	Container Storage	40 CFR 264.1086
Flammable Materials Storage Shelter	Container Storage	40 CFR 264.1086

VI. 100-Year Floodplain Requirements [40 CFR 264.18(b)]

- A. The Permittee has submitted information, as required in 40 CFR 270.14(b)(iii), which identifies the facility as not being located in the 100-year floodplain.

## CORRECTIVE ACTION CONDITIONS

### I. Identification of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) [40 CFR 264.101]

An Environmental Priorities Initiative Preliminary Assessment (EPI-PA) was completed for the United States Environmental Protection Agency on December 30, 1991. No actual or potential releases from AOCs and SWMUs identified during the EPI-PA were documented. No information submitted in the approved, updated Permit application or elsewhere identified any new SWMUs or AOCs requiring further action. Figure 1 details the SWMU locations identified in the EPI-PA.

#### Warehouse Drum Storage Area - SWMU #1

This SWMU is placed in the northwest corner of the warehouse area and it has a secondary containment that is achieved by the presence of a monolithically cast steel reinforced concrete dike and slab system. Wastes managed in this unit are described in Special Permit Condition I.A. of this Permit. There is a low probability of a release from this SWMU with the design and continued maintenance of the secondary containment.

#### Return and Fill Station - SWMU #2

The solvent return and fill station is used to collect fresh and spent solvents that are accumulated in the aboveground storage tanks in SWMU #3. Wastes managed in this unit are described in Special Permit Condition II.A. of this permit. No documented releases at or from this unit have occurred.

#### Aboveground Solvent Storage Tanks (North Tank Farm) - SWMU #3

This tank farm has two 15,000-gallon product storage tank and one 15,000-gallon waste storage tank. The 15,000-gallon waste tank is used for storage of spent mineral spirits. The spent solvents are accumulated in the tank via the return and fill station and aboveground piping. Wastes managed in the spent mineral spirits tank are described in Special Permit Condition II.A. of this Permit. There is a low probability of a release from this SWMU with the design and continued maintenance of the secondary containment.

#### Tank Farm (West) – SWMU #4

This tank farm has three 20,000-gallon capacity waste tanks. One is used for used oil, one for industrial wastewater, and one historically used for waste anti-freeze.



Historically, this 20,000-gallon tank was permitted to manage anti-freeze, but was clean

closed through permit modification in September 1996, and the use of the tank was converted to management of waste oil tank. Waste oil is typically collected from automotive service stations and shipped off-site for recycling.

#### Flammables Storage Shelter - SWMU#5

This SWMU is a class 1B flammable storage shelter. It measures 15' X 20', has two large metal garage-type doors on the east side and a raised steel grate deck. Wastes stored at this location consist of various lacquer thinners and paints. There is a low probability of a release from this SWMU.

#### Industrial Waste Storage Shelter - SWMU#6

This SWMU is an explosion proof industrial waste storage shelter. There are two of these portable flammable sheds at this location. Transfer wastes are stored in these sheds.

#### AOC – Loading Area Storm Drain

A potential for release during loading/unloading of containerized solvents exists; and no sampling has been performed in this area as discussed in the EPI-PA. This area remains a designated AOC, but requires no further action at this time.

## II. Notification Requirements for, and Assessment of, Newly Identified SWMU(s) and AOCs

- A. The Permittee shall notify the Department and the United States Environmental Protection Agency (EPA) in writing of any SWMU(s) or AOC(s) identified subsequent to the issuance of this Permit no later than 15 days after discovery.
- B. The Department may require a SWMU/AOC Assessment Work Plan for conducting an investigation of any existing or newly identified SWMU(s) or AOC(s). Within 30 days after receipt of the Department's request for a SWMU/AOC Assessment Work Plan, the Permittee shall submit a SWMU/AOC Assessment Work Plan which shall include a discussion of past waste management practices at the unit, as well as a sampling and analysis program for groundwater, land surface and subsurface strata, surface water and/or air, as necessary to determine whether a release of hazardous waste, including hazardous constituents, from such unit(s) has occurred, or is occurring. The sampling and analysis program shall be capable of yielding representative samples and must include monitoring parameters sufficient to assess the release of hazardous waste and/or hazardous constituents from the newly identified SWMU(s)/AOC(s) to the

environment. The SWMU/AOC Assessment Work Plan shall specify any data to be collected to provide for a complete SWMU/AOC Assessment Report, as specified below, and shall contain a schedule for implementation of the work plan which is predicated on the date of Departmental approval of the plan.

- C. The SWMU/AOC Assessment Work Plan will be reviewed in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. The Permittee shall complete implementation in accordance with the schedule contained in the approved plan.
- D. The Permittee shall submit a SWMU/AOC Assessment Report to the Department and the EPA according to the schedule specified in the approved SWMU/AOC Assessment Work Plan. The SWMU/AOC Assessment Report shall present and discuss the information obtained from implementation of the approved SWMU/AOC Assessment Work Plan. At a minimum, the SWMU/AOC Assessment Report shall provide the following information for each newly identified SWMU/AOC:
  - 1. The location of the newly identified SWMU/AOC in relation to other SWMUs/AOCs;
  - 2. The type and function of the unit;
  - 3. The general dimensions, capacities, and structural description of the unit;
  - 4. The period during which the unit was operated;
  - 5. The physical and chemical properties of all wastes that have been or are being managed at the SWMU/AOC, to the extent available;
  - 6. The results of any sampling and analysis conducted;
  - 7. Past and present operating practices;
  - 8. Previous uses of the area occupied by the SWMU/AOC;
  - 9. Amounts of waste handled; and
  - 10. Drainage areas and/or drainage patterns near the SWMU(s)/AOC(s).
- E. The Department will review the SWMU/AOC Assessment Report in accordance

with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. Based on the findings of this report, the Department will determine the need for further investigations, including stabilization or a Resource Conservation and Recovery Act Facility Investigation (RFI), at specific unit(s) identified in the SWMU/AOC Assessment Report.

- F. If the Department determines that additional investigations are needed, the Department may require the Permittee to prepare and submit for approval a work plan for such investigations. The Department will review this work plan for additional investigations in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. The Permittee shall complete implementation in accordance with the schedule contained in the approved plan.

III. Notification Requirements for, and Assessment of, Newly Identified Releases From Previously Identified SWMUs and AOCs

- A. The Permittee shall notify the Department and the EPA, in writing, no later than 15 days after discovery, or after discovery should have been made of any newly identified release(s) of hazardous waste, including hazardous constituents from previously identified SWMUs and/or AOCs, discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken after issuance of this Permit.
- B. The Department may require a Newly Identified Release Work Plan for conducting an investigation of the newly identified release(s). Within 30 days after receipt of notice that the Department requires a Newly Identified Release Work Plan, the Permittee shall submit a Newly Identified Release Work Plan which shall include a discussion of the waste/chemical management practices related to the release; a sampling and analysis program for groundwater, land surface and subsurface strata, surface water or air, as necessary to determine whether the release poses a threat to human health or the environment; and a proposed schedule for implementation and completion of the Newly Identified Release Work Plan. The sampling and analysis program shall be capable of yielding representative samples and must include monitoring parameters sufficient to assess the release of hazardous waste and/or hazardous constituents to the environment. The Newly Identified Release Work Plan shall identify any data to be collected to provide for a complete Newly Identified Release Report, as specified below and shall contain a schedule for implementation of the work plan which is predicated on the date of Departmental approval of the plan.

- C. The Department will review the Newly Identified Release Work Plan in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. The Permittee shall initiate and complete implementation of the plan and in accordance with the schedule contained in the approved plan.
- D. The Permittee shall submit a Newly Identified Release Report to the Department and the EPA according to the schedule specified in the approved Newly Identified Release Work Plan. The Newly Identified Release Report shall present and discuss the information obtained during implementation of the approved Newly Identified Release Work Plan. At a minimum, the report shall provide the following information for each newly identified release:
1. The location of the newly identified release in relation to other SWMU(s);
  2. The general dimensions of the release;
  3. The period during which the release is suspected to have occurred;
  4. The physical and chemical properties of all wastes that have been determined to comprise the release;
  5. The results of any sampling and analysis conducted;
  6. Past and present operating practices near and at the location of the release;
  7. Previous uses of the area(s) occupied near and at the location of the release;
  8. Amounts of waste handled near and at the location of the release; and
  9. Drainage areas and/or drainage patterns near and at the location of the release.
- E. The Department will review the Newly Identified Release Report in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. Based on the findings of the report and any other available information, the Department will determine the need for further

investigation, including stabilization, an Resource Conservation and Recovery Act Facility Investigation (RFI), and/or a Corrective Measures Study.

IV. Interim/Stabilization Measures

- A. If the Permittee becomes aware of a situation that may require interim/stabilization measures to protect human health or the environment, the Permittee shall notify the Department and the EPA within 24 hours of the time the Permittee becomes aware or should have become aware of the situation.
- B. If during the course of any activity initiated under this Permit, the Permittee or the Department determines that a release or potential release of hazardous waste, including hazardous constituents, poses a threat to human health or the environment, the Department may require interim/stabilization measures to slow or stop the further spread of contamination until final corrective action measures can be implemented. The Department will determine the specific action(s) that must be taken to implement interim/stabilization measures, including potential Permit modifications and the schedule for implementing the interim/stabilization requirements and will inform the Permittee of decisions regarding the action(s) in writing. This requirement shall not preclude the Permittee from responding to an emergency situation without direction of the Department.
- C. If, at any time, the Permittee determines or should have known that the interim/stabilization measures program is not effectively limiting or stopping the further spread of contamination, the Permittee shall notify the Department in writing no later than ten days after such a determination is made. The Department may require that the interim/stabilization measures program be revised to make it effective in limiting or stopping the spread of contamination; or that final corrective action measures are required to remediate the contaminated media.
- D. In cases where releases present minimal exposure concerns and/or the remedial solution is straightforward, the Permittee may propose interim/stabilization measures for review and approval by the Department. These interim/stabilization measures shall be consistent with and may supplement and/or satisfy the requirements for a final remedy(s) in specific areas.

V. RFI Work Plan

- A. If the Department determines that additional investigations are needed, the

Department may require the Permittee to prepare and submit for approval an RFI Work Plan. The Permittee shall submit an RFI Work Plan to the Department and the EPA within 60 days of the notification of the requirement to prepare an RFI Work Plan. The RFI Work Plan shall be designed to investigate releases of hazardous waste, including hazardous constituents, to all appropriate media of concern including soil, sediment, bedrock, groundwater, surface water, and/or air. In order to substantiate future corrective action decisions, the RFI Work Plan shall contain provisions which are sufficient to meet the following objectives and shall contain a schedule for implementation of the work plan which is predicated on the date of Departmental approval of the plan:

1. Full characterization of the nature, vertical and horizontal extent, and rate of migration of releases of hazardous waste and/or hazardous constituents from SWMUs and AOCs, or groups of SWMUs at the facility and the actual or potential receptors of such releases; and
  2. Collection of any other pertinent data that may be utilized to substantiate future corrective action decisions.
- B. The RFI Work Plan shall be appropriate for site-specific conditions and shall be consistent with and address all applicable investigation elements described in the most recent version (currently May 1989) of the EPA guidance document entitled, RCRA Facility Investigation Guidance; EPA 530/SW-89-031. At a minimum, the RFI Work Plan shall detail all proposed activities and procedures to be conducted at the facility, a description of current conditions, the schedule for implementing and completing such investigations, and for submission of reports (including the final RFI Report), the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the RFI.
- C. The RFI Work Plan shall include a Quality Assurance Project Plan (QAPP). The QAPP shall present the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to achieve the data quality goals of the RFI. It shall include the RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures and data review, validation and reporting procedures.
- D. The Permittee shall prepare and maintain a Health and Safety Plan during the project that assures the RFI activities are conducted in a manner that is protective of human health and the environment.

- E. Due to the complexity of defining the extent of contamination, the Permittee may be required to use a phased approach that requires the submittal of supplemental RFI Work Plans.
- F. The Department will review the RFI Work Plan(s) in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. The Permittee shall complete implementation in accordance with the schedules contained in the approved plan(s).

VI. RFI Report

- A. The Permittee shall submit a RFI Report to the Department and the EPA according to the schedule contained in the approved RFI Work Plan set forth in Corrective Action Condition V. The RFI Report shall present all information gathered under the approved RFI Work Plan along with a brief facility description and map showing the property boundary and all SWMUs/AOCs. The RFI Report must contain adequate information to support further corrective action decisions at the facility. Information contained in the RFI Report shall be presented in a format that is consistent with Section 5 of the most recent version (currently May 1989) of the EPA Publication entitled, RCRA Facility Investigation Guidance; EPA 530/SW-89-031.
- B. The RFI Report shall provide an interpretation of the RFI information gathered, supported with documentation, to enable the Department to determine whether internal stabilization measures and/or a CMS may be necessary.

The RFI Report shall describe the procedures, methods, and results of all Investigations of SWMUs/AOCs and associated releases, including, but not limited to, the following, as appropriate:

- 1. Characterization of the nature, concentration(s), horizontal and vertical extent, and direction/rate of movement of releases from SWMUs/AOCs at the facility;
- 2. Characterization of the environmental setting of the facility, including:
  - a. Hydrogeological conditions;



- b. Climatological conditions;
    - c. Soil and bedrock characteristics;
    - d. Surface water and sediment quality; and
    - e. Air quality and meteorological conditions.
  - 3. Characterization of SWMUs/AOCs from which releases have been or may be occurring, including unit and waste characteristics;
  - 4. Descriptions of human and environmental receptors and associated risks to the receptors which are, may have been, or, based on site-specific circumstances, could be exposed to release(s) from SWMUs/AOCs;
  - 5. Assessment of potential risks to the human and environmental receptors exposed to release(s) from SWMUs/AOCs;
  - 6. Extrapolations of future contaminant movement including description of contaminant fate and transport mechanisms, and pathways for human and environmental exposure;
  - 7. Laboratory, bench-scale, pilot-scale and/or appropriate tests or studies to determine the feasibility or effectiveness of treatment technologies, or other technologies that may be appropriate in implementing remedies at the facility;
  - 8. Statistical analyses to aid in the interpretation of data;
  - 9. Results of any interim/stabilization measures previously implemented; and
  - 10. Evaluation of data quality which may affect the nature and scope of a CMS as well as the evaluation of corrective measures alternatives thereunder (e.g., identification of any potential bias in the RFI data, and documentation of its precision, accuracy, representativeness, completeness, comparability, validation, etc.)
- C. The Department will review the RFI Report in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. After review of the RFI Report, if the Department determines that the objectives

of the RFI have not been met, the Department may require additional investigation. Upon approval of the RFI Report by the Department, the Department shall advise the Permittee as to the next step in the corrective action process that may include submittal of a Corrective Measures Study (CMS) Work Plan pursuant to Corrective Action Condition VII.

VII. CMS Work Plan

- A. If the Department determines that there has been a release of hazardous waste and/or hazardous constituents from a SWMU and/or AOC that may present a threat to human health or the environment, the Department may require a CMS and will notify the Permittee in writing of this decision. This notice will identify the hazardous constituent(s) of concern and may specify remedial alternatives to be evaluated by the Permittee during the CMS.
- B. The Department may require the Permittee to evaluate, as part of the CMS, one or more specific potential remedies. These remedies may include a specific technology or combination of technologies that, in the Department's judgment, may be capable of achieving standards for protection of human health and the environment.
- C. The Permittee shall submit a CMS Work Plan to the Department and the EPA within 45 days of notification of the requirement to conduct a CMS. The CMS Work Plan shall be consistent with guidance contained in the EPA document entitled: RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A. At a minimum, the CMS Work Plan shall provide the following information and shall contain a schedule for implementation of the work plan which is predicated on the date of Departmental approval of the plan:
  - 1. A description of the general approach to investigating and evaluating potential remedies;
  - 2. A definition of the specific objectives of the study;
  - 3. A description of the remedies which will be studied;
  - 4. A description of those potential remedies that were preliminarily considered, but were dropped from further consideration including the rationale for elimination;
  - 5. The specific plans for evaluating remedies to ensure compliance with

remedy standards;

6. The schedules for conducting the study and submitting a CMS Report;
  7. The proposed format for the presentation of information; and
  8. Laboratory, bench-scale, pilot-scale and/or appropriate tests or studies to determine the feasibility or effectiveness of treatment technologies, or other technologies that may be appropriate in implementing remedies at the facility.
- D. The Department will review any CMS Work Plan required by this Permit in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. The Permittee shall complete implementation of the plan in accordance with the schedule contained in the approved plan.

#### VIII. CMS Report

- A. The Permittee shall submit a CMS Report to the Department and the EPA according to the schedule contained in the approved CMS Work Plan. The CMS Report shall present all information gathered under the approved CMS Work Plan and shall be consistent with guidance contained in the EPA document entitled, RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A.

The CMS Report shall summarize the results of the investigations for each remedy studied and of any bench-scale or pilot tests conducted. The CMS Report shall include, but not be limited to, the following information:

1. Evaluation of performance, reliability, ease of implementation, and potential impacts of each remedy studied, including safety impacts, cross media impacts, and control of exposure to any residual contamination;
2. Assessment of the effectiveness of each remedy in achieving adequate control of sources and cleanup of the hazardous waste or hazardous constituents released from the SWMU(s)/AOC(s);
3. Assessment of the time required to begin and complete each remedy;
4. Estimation of the costs of implementing each remedy;
5. Recommendation of remedy and rationale for selection; and

6. Assessment of institutional requirements, such as state or local permit requirements, or other environmental or public health requirements which may substantially affect implementation of the remedy.
- B. The CMS Final Report shall contain adequate information to support the Department in the remedy approval decision-making process.
- C. The Department will review the CMS Final Report in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XIII. Upon approval thereof by the Department, the Department will approve a final remedy as specified in Corrective Action Condition IX.

IX. Final Remedy Approval

Following the approval of the CMS Final Report or equivalent, the Department will prepare a Statement of Basis (SB) summarizing the corrective measures alternatives that were evaluated by the Permittee, including justification for the proposed final remedy selected by the Department.

Following preparation of the SB by the Department, a Permit modification will be initiated pursuant to 40 CFR 270.41 or 270.42(c), as applicable, to implement the final remedy.

Upon completion of the public participation activities associated with the Permit modification to implement the proposed final remedy, the Department will approve a final remedy that will: 1) be protective of human health and the environment; 2) control and/or eliminate the source(s) of contaminants so as to reduce or eliminate, to the maximum extent practicable, further contaminant releases, exposures or migration that might pose a threat to human health and the environment; and 3) meet all applicable federal, state, and local laws and regulations.

X. Annual Progress Reports

- A. Should “active” corrective action become necessary pursuant to the corrective action conditions of this Permit, the Permittee shall submit to the Department and the EPA signed Annual Progress Reports summarizing all permitted corrective action activities undertaken during each calendar year. Each Annual Progress Report shall be due to the Department by March 1 of each calendar year for the preceding calendar year.

The Annual Progress Reports shall continue to be submitted until such time as the Permittee's corrective action activities (including any long-term operation, maintenance and monitoring activities) are complete. The Annual Progress Reports shall include the following information for the time period being reported:

1. A description of the work completed;
  2. Summaries of all findings, including summaries of laboratory data;
  3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;
  4. Projected work for the next reporting period; and
  5. Any instances of noncompliance with the corrective action requirements of this Permit not otherwise required to be reported elsewhere in this Permit.
- B. If the Department determines that further corrective action is required pursuant to Corrective Action Conditions II. through X., the frequency of submittal of progress reports may increase. If an increase in reporting frequency is necessary, the Department will provide written notification of the new reporting frequency to the Permittee.
- As part of any additional corrective action activities undertaken pursuant to this Permit, detailed technical information required to be submitted as part of interim/stabilization measures, RFI and/or CMS reports and work plans need not be reproduced as part of the Permittee's Progress Reports.
- C. Copies of other reports (e.g., inspection reports), information or data shall be made available to the Department and the EPA upon request.

#### XI. Supplemental Data

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained by the Permittee during the term of this Permit, including the term of any re-issued permits.

#### XII. Financial Assurance for Corrective Action

- A. Within 120 days after this Permit has been modified to include a final remedy, the Permittee shall demonstrate continuous compliance with the financial assurance requirements in effect at that time for corrective action being performed under state law. The effective financial assurance requirements for corrective action shall be consistent with and/or substantially equivalent to that specified in either final RCRA Subpart S corrective action regulations or 40 CFR Part 264 Subpart H, as incorporated by reference in 10 CSR 25-7.264. The amount of financial assurance shall be based on the Permittee's cost estimate for the approved final remedy as contained in the approved CMS Final Report or equivalent.
- B. Annually, by March 1, the Permittee shall adjust the corrective action cost estimate to account for inflation in accordance with 40 CFR 264.142(b) and any other changes in the costs associated with the implementation, operation, maintenance, and monitoring of the approved final remedy. If the cost estimate increases, documentation of adequate financial assurance for that increase shall be submitted to the Department within 60 days after the increase in the cost estimate.

### XIII. Review and Approval Procedures

Following submission of any plan or report pertaining to corrective action activities, the Department will review and either approve or disapprove the plan or report in writing.

If the Department does not approve the plan or report, the Department will notify the Permittee in writing of the deficiencies in the plan or report and specify a due date for submittal of a revised plan or report.

If the Department does not approve the revised plan or report, the Department may modify the plan or report and notify the Permittee of the modifications. The plan or report as modified by the Department shall be the approved plan or report.

If the Permittee disagrees with any Department-initiated plan or report modifications, and a mutually acceptable resolution of such modifications cannot be informally reached, the Permittee may file any appeal of the Department-initiated modifications in accordance with Section 260.395.11 and 621.250, RSMo, and 10 CSR 25-8.

### XIV. Facility Submission Summary

- A. The Permittee shall comply, as necessary, with the schedule(s) for planned

activities as specified in the Standard and General Permit Conditions of this Permit, and as summarized in Table III.

- B. The Permittee shall comply, as necessary, with the schedule(s) for contingent corrective action activities as specified in the Corrective Action Conditions of this Permit, and as summarized in Table IV.

### FACILITY SUBMISSION SUMMARY

TABLE III - Summary of the Submittal Requirements Pursuant to this Permit

SUBMITTAL REQUIREMENTS	DUE DATE	PERMIT CONDITION
Consolidated Permit Application	Within 60 calendar days of effective date of this permit.	Schedule of Compliance Item I.A.
Certification that Permittee has read and understands this Permit	Within 60 calendar days of effective date of this permit.	Schedule of Compliance Item I.B.
Check or money order for \$9000 and all outstanding engineering review costs.	Within 60 calendar days of effective date of this permit.	Schedule of Compliance Item I.C. & D.
The Permittee shall update the facility's financial assurance instrument to reflect the cost estimate located in the approved Permit application.	Within 60 calendar days after the effective date of this Permit.	Schedule of Compliance Item II.
Quarterly Reports with information required by 10 CSR 25-5.262(2)(D) and 10 CSR 25-7.264(2)(E)	Within 45 calendar days after the end of each quarter.	Standard Permit Condition I.
Biennial Report with information required by 40 CFR 264.75	March 1 of each even numbered calendar year.	General Permit Condition I.



Table IV - Summary of the Contingent Corrective Action Submittal Requirements

CONTINGENT SUBMITTAL REQUIREMENTS	DUE DATE	CORRECTIVE ACTION CONDITION
Written Notification of Newly Identified SWMU(s) and AOC(s)	No later than 15 days after discovery.	II.A.
SWMU/AOC Assessment Work Plan	Within 30 calendar days of notice by the Department that a work plan is required.	II.B.
SWMU/AOC Assessment Report	In accordance with the schedule in the Assessment Work Plan.	II.D.
Written Notification of Newly Identified Releases from SWMU(s) and AOC(s)	No later than 15 days after discovery.	III.A.
Newly Identified Release Work Plan	Within 30 calendar days of notice by the Department that a work plan is required.	III.B.
Newly Identified Release Report	In accordance with the schedule in the approved Newly Identified Release Work Plan.	III.D.
Stabilization Notification	Within 24 hours of discovery of need for stabilization.	IV.A.
Stabilization Not Effective Notification	Within ten calendar days of determination by Permittee.	IV.C.
RCRA Facility Investigation (RFI) Work Plan	Within 60 calendar days of notice that the Plan is required.	V.A.
RCRA Facility Investigation (RFI) Report	In accordance with the schedule in the approved RFI Work Plan.	VI.A.

Corrective Measures Study (CMS) Work Plan	In accordance with the schedule in the approved RFI Report.	VII.A
Corrective Measures Study (CMS) Report	In accordance with the schedule in the approved CMS Plan.	VIII.A.
Final Remedy Approval	In accordance with the schedule in the implementation Permit modification.	IX.
Annual Progress Reports	March 1 of each calendar year.	X.
Financial Assurance for Corrective Action	Within 120 days after the final remedy Permit modification.	XII.A.
Update of Financial Assurance for Corrective Action	March 1 of each calendar year.	XII.B.

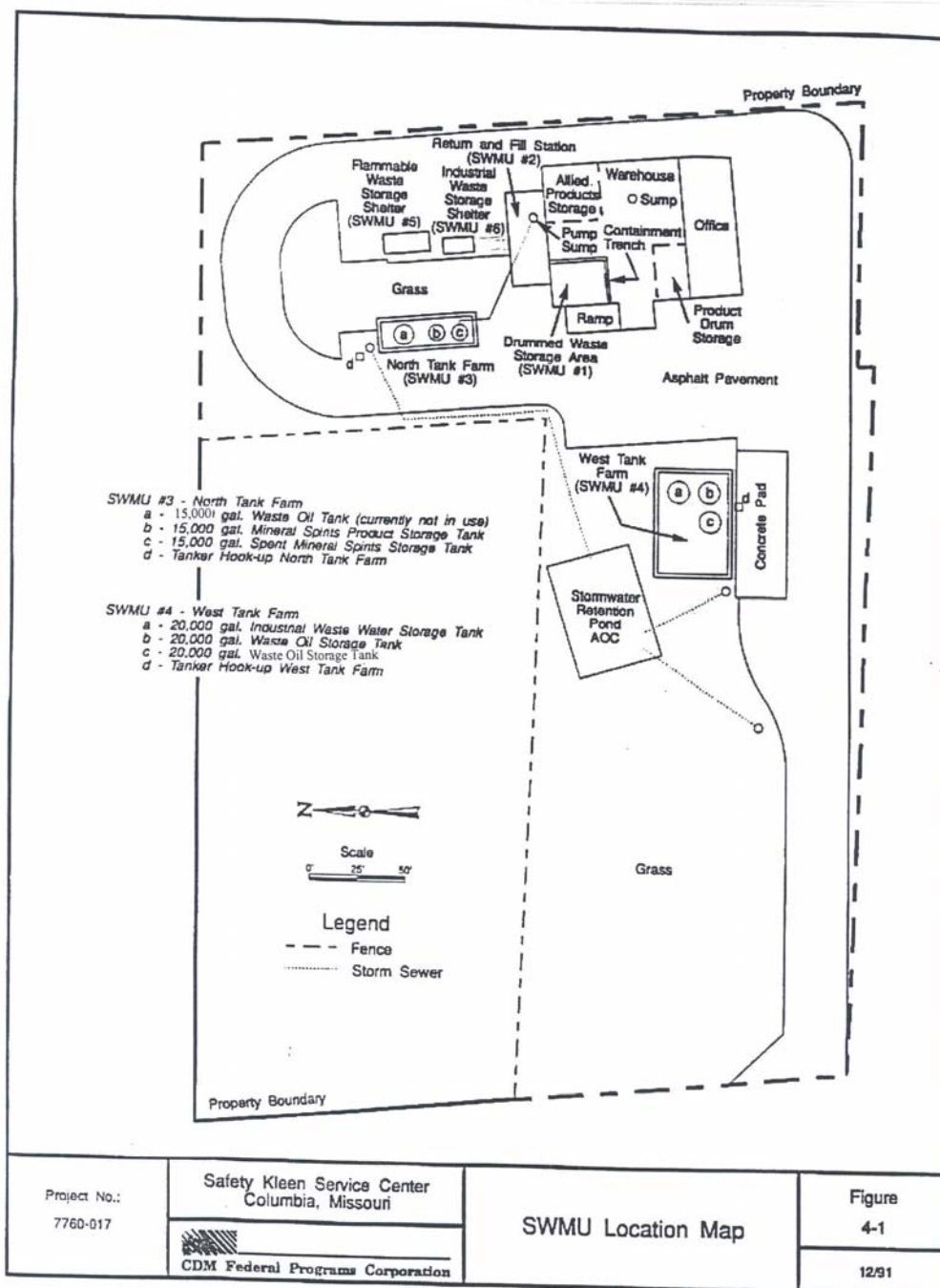


Figure 1